

From: LE(n) [c=US;a=DMS;o=GA1;out=UHHZ1;ou2=WRALC;ou3=LE;dda:msxcx500=c:US,o:U.S. Government,ou:DOD,ou:AF,ou:Organizations,1:ROBINS AFB GA,ou:WRALC(n),ou:LE(n)]

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To: LGM(n); LGM(n); LGM(n); LG(n); LGB(n); LGM(n); LGM(n); DOM(n); LGM(n); LGM(n); LC(n); LH(n); LAK(n); LAB(n); LAL(n); TI(n); TIE(n); LC(n); LA(n); LIL(n); LA(n); LB(n); LC(n); LJ(n); LK(n); LF(n); LU(n); LR(n); TI(n); FB(n); FBA(n); FBJ(n); GR(n); LU(n); RA(n); YC(n); YD(n); YF(n); YN(n); YP(n); YS(n); YT(n) Cc: ILMM(n); ML(n)

Subject: OPERATIONAL SAFETY SUPPLEMENT 1-1-8SS-1, Dated 17 August 2001, (APPLICATION AND REMOVAL OF ORGANIC COATINGS, AEROSPACE AND NON - AEROSPACE EQUIPMENT)

Importance: Low

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AFMC/AFRL WRIGHT-PATTERSON AFB OH//MLSS/MLSA//

Subject: OPERATIONAL SAFETY SUPPLEMENT 1-1-8SS-1, Dated 17 August 2001, (APPLICATION AND REMOVAL OF ORGANIC COATINGS, AEROSPACE AND NON - AREOSPACE EQUIPMENT).

1. This Publication supplements T. O. 1-1-8, dated 23 April 2001. A suitable reference to this supplement will be made on the title page of the basic publication. Commanders are responsible for bringing this Safety Supplement to the attention of all affected personnel. MAJCOMS, FOAS, and DRUS are responsible for retransmitting this SS to subordinate units not included as addressees on this message.

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Purpose: Recent studies have found that Plastic Media Abrasive Blasting operations for paint removal on aircraft and aircraft components contain large amounts of dense particle contamination and are consequently causing unacceptable damage. All operations using Plastic Media Blasting for paint removal in accordance with this technical order will comply immediately with the following change.

A. All shops using Plastic Media Blasting as a paint removal process for aircraft and aircraft components must have performed the contamination test requirements of 2-21.13.3 within the last 80 hours of operation as of the effective date of this supplement. In the event that operational hours of the PMB blasting equipment have not been tracked, then contamination testing or a complete replacement of media must have been performed within the last 60 days. Any shop that either has not performed this test or has not completely replaced the media is prohibited from using this process for paint removal on aircraft or their components. This requirement applies to all blasting equipment including small glove booths for paint removal from wheels and any other small aircraft components using plastic media. If the capability for testing of media contamination is not available, use of this blasting equipment for paint removal of aircraft

and aircraft components may be resumed only after all media has been completely purged and replaced with new media. Additionally, the media will be changed out every 80 hours of operation with new media until the testing capability for contamination can be performed.

B. Operations that fail to establish a means; for testing their media for contamination within 180 days of the effective date of this supplement shall be limited to paint removal on NON-aerospace applications only.

C. Change to amend the requirements for PMB paint removal as follows:

Amend to delete 2-21.13 and replace with the following: "These contamination level test procedures allow the user to identify the quantity and class of contaminants in the blast media. The media in use in the PMB equipment for paint removal of aircraft and aircraft components shall be sampled and tested for contamination level at a minimum of every 80 hours of equipment operation time or after each aircraft or large piece of aerospace equipment is blasted (whichever is longer).. If high levels of contamination are found, the frequency of testing should be increased to determine what the appropriate length of operation is before the maximum permitted levels of contamination are reached. Non-aerospace equipment such as SE and vehicles are, less sensitive to damage from media contamination, so media used to strip these: items shall be tested for contamination every 800 hours of equipment operation. If media is being replaced more frequently than 800 hours the testing frequency should be adjusted accordingly. Plastic media that has been used to blast steel/ ferrous items for paint removal or other coatings removal shall not be used on aluminum aircraft surfaces or components. Media found to have a high-dense particle contamination level greater than that specified in paragraph 2-21.13.3.9 below shall be purged from the system and replaced with new media. Testing at ALCs shall be accomplished by the physical sciences laboratory (XX-ALC/TIXX). Testing at contractor and field level activities shall be accomplished locally in a designated area adequately equipped to run the test for contamination. Determine the contamination level in accordance with the following procedure:"

Amend 2-21.13.1.4 to delete text entirely and replace with, Perfluorohexane, (SG 1.68),"3M Co. P/N PF-5060 or equivalent".

Amend 2-21.13.1.5. to delete text entirely and replace with, "ASTM D1836 N-Hexane
NSN 8040-00-853-8913 for a 1 gal. can, (SG 0.66)."
(Adhesive Thinner)

Amend 2-21.13.1.19 to delete "Specimen forceps" and replace with "Bar magnet"

Amend 2-21.13.2 to read " Sampling Procedure: Collect approximately two liters of used media, preferably from the blast pot or hose.

Amend 2-21.13.2.2 to delete text entirely.

Amend 2-21.13.3.2. to delete text entirely and replace with,

"Prepare a mixture of 95% by volume Perfluorohexane (SG 1.68), 3M Co. P/N PF-5060™, and 5% by volume ASTM D1836 N-Hexane (SG 0.66). To make mixing easier, pour the N- Hexane into the container first, and then add the PF-5060™ fluid. Using a hydrometer, measure the specific gravity (SG) of the mixture to ensure it is within the range of 1.60 to 1.66. If the SG is below 1.60 add a small amount of PF-5060™ until the SG is within range; if the SG is above 1.66, add very small amounts of N-Hexane until the SG is within range. This fluid mixture is to be used in testing for high density particle contamination of used media. The specific gravity (SG) of this fluid mixture is high enough to float the light plastic media particles while allowing high density particles to separate and settle out. A quantity of this test fluid mix may be prepared in advance and stored until needed in small necked, tightly capped bottles marked with the value of the specific gravity (SG) of the fluid they contain."

Amend to add as last sentence to 2-21.13.3.6

"After weighing, use a magnet to determine if any steel/ferrous material is in the dense particles."

Amend 2-21.13.3.9 to be replaced with the following:

"Sand, concrete, and glass particles tend to cause pitting and the most fatigue life degradation while steel/ferrous particles will pit and embed in softer aluminum and magnesium substrates. The high density particle contaminant

level shall not exceed 0.02% for all used media employed in aerospace equipment stripping operations. For non-aerospace equipment (SE, vehicles, Etc.) stripping operations, the high density particle contamination level shall not exceed 2.0% for used media. Media containing any steel/ferrous metal in the dense particles is immediately prohibited from further use on any aluminum alloy aircraft areas and/or aircraft components until the media is completely replaced. Media found to exceed these dense particle levels must be replaced immediately."

3. POC in WR-ALC/LESGL is Rodney Forbes, DSN 468-7046 ext. 122.
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